feature of the situation that the campaign of inoculation was pushed with vigour and was facilitated by an increasing realisation of its usefulness on the part of the people. It is reported that the spread of rinderpest was effectively checked by means of S. S. inoculation, 72,535 cattle having been so inoculated, only 2 of them being reported to have shown symptoms of the disease and that only in a very mild form. Active immunisation is now universally adopted in the State and the results have been very satisfactory. As the Veterinary staff was fully occupied in combating the spread of rinderpest, it was not possible for them to devote as much attention as could be desired to cases of anthrax and haemorrhagic septiciemia.

6. *Serum Institute.*—The Serum Institute was developed and placed on a satisfactory basis. The expansion of the inoculation work this year was largely due to the successful production of serum in the Institute. As the Director's review of the work of the Institute has already been recorded, it is unnecessary to dwell on it at greater length here.

7. *Hospitals and Dispensaries.*—Six Dispensaries were opened during the year at Goribidnur, Gundlupet, Channarayapatna, Nelamangala, Hoskote and Sorab. The total number of Veterinary Institutions in the State stood at 45 at the end of the year. Orders have since been passed for the immediate opening of Veterinary Dispensaries at Devanhalli and Heggaddevankote. The generous offer of a building for the purpose at the former place by Mr. Yele Krishnappa has been thankfully accepted by Government.

It has been brought to notice that the equipment of Veterinary Dispensaries requires to be improved.

8. *Cattle Fairs.*—The Officers of the Department attended 75 out of 95 cattle fairs, and temporary dispensaries were opened at fairs wherever accommodation was available. The Director of Agriculture is requested to examine the present position in regard to the regulation of cattle fairs from the point of sanitation and safeguards against spread of cattle diseases, and submit proposals to Government regarding the measures necessary for minimising the dangers incidental to a large congregation of cattle from all parts of the country.

Government notice with regret that there is a serious shortage in the State's supply of breeding bulls, and think that the matter requires early and careful consideration. They have referred in their review of the Administration Report of the Amrit Mahal Department to the desirability of that Department concentrating its resources as far as possible on the production of breeding stock for improving the cattle of the raiyats; but this can only meet the situation partially, and it will still be necessary to take steps to provide a large number of breeding bulls from other sources. Government trust that the recently constituted Special Committee presided over by the Director of Agriculture will investigate this question thoroughly and furnish its recommendations.

Government are glad to note that the Department has worked satisfactorily during the year under review.

N. RAMA RAO,
Secretary to Government,
Development Departments.

Reviews the Report on the Administration of the Geological Department for the year 1927-28

READ—

Letter No. 2549-7, dated the 20th September 1928, from the Director of Geology in Mysore, submitting the Administration Report on the working of the Department of Geology for 1927-28.

ORDER NO. D. 6623-8—GEOL. 46-28-4, DATED 22ND DECEMBER 1928.

Recorded.

2. Mr. P. Sampat Iyengar was in charge of the Department during the year under report, except for a short period of one month from 26th April 1928.

3. *Prospecting and Mining Rights.*—There were 36 certificates of approval for mining and prospecting in force as against 50 in the previous year. No fresh mining leases for manganese and chrome were issued during the year, the total number of leases current being 45, as against 47 in the previous year.

4. *Mining Activities.*—Mining activity was in evidence on 48 blocks of which 37 were mining leases, and 11 under prospecting licenses in the year under report, as against 34 and 16 respectively in 1926-27, making a total of 50.

(*a*) As in the previous year mining work was carried on and gold produced by five mining companies on the Kolar Gold Fields and the results are as shown below:—

	1926-27. (Actuals.) Ozs.	1927-28. (Approximate.) Ozs.
Total quantity of gold produced ..	381,607·782	382,178·6

	Rs. a. p.	Rs. a. p.
Approximate value	2,16,73,912 9 0	2,16,40,454 15 0
Royalty due	11,88,400 8 0	11,87,580 14 0

(*b*) *Manganese.*—There were 7 prospecting licenses under "the profit sharing scheme" current during the year, and some ore was won and royalty paid thereon in the case of only two of them.

(*c*) *Chromite.*—As in last year, there were 10 mining leases current and one prospecting license, as against six in the year previous.

(*d*) *Magnesite.*—The number of mining leases and prospecting licenses current were the same as in the previous year, *viz.*, 4 and 3 respectively.

(*e*) *Kaolin or China Clay.*—Four mining leases and one prospecting license were current during the year as against 4 and 2 in 1926-27.

5. *Departmental Mining.*—Mining operations carried on by Government Agency at Byrapur in the Channarayapatna Taluk resulted in a considerable output of chromite. Ten thousand five hundred and forty-eight tons of lump ore and 300 tons of powder were sold at pits mouth for a sum of Rs. 2,16,719-11-6. Mining operations are also in progress at Tallur, near Mysore. Copper prospecting at Ingaldhal in the Chitaldrug District was in progress in the year under review. The Department is conducting experiments with a view to ascertain whether crushed limestone could be made available for agricultural purposes. Towards this end about 18 tons of limestone crushed to 1" size were obtained from the Mysore Iron Works, and sent to Marikuppam for being crushed further. The powdered material is kept in stock for distribution among the agriculturists.

6. Exclusive of the royalty on gold and silver the demand, collection and balance of mining revenue are as shown below:—

Items	Demand	Collection	Balance
	Rs. a. p.	Rs. a. p.	Rs. a. p.
1. Royalty	56,380 0 10	40,544 11 11	*15,835 4 11
2. Rent on mining and prospecting.	17,759 8 3	17,418 4 9	341 4 0
3. Other receipts	685 0 0	685 0 0	....
4. Geological receipts ..	1,078 14 10	1,078 14 10	....
5. Receipts credited under "Advance" head.	2,20,110 0 6	2,20,110 0 6	....
6. Revenue deposits	2,623 0 0	2,623 0 0	....
Total ..	2,98,636 8 5	2,82,460 0 0	16,176 8 11

*Out of the balance to be recovered a sum of Rs. 11,750-2-0 has since been written off the accounts.

7. *Geological and Mineral Survey.*—For want of an adequate staff sufficient attention was not bestowed on Geological Survey work. Nevertheless, a good deal of

information has been collected about the rock types associated with the mineral deposits in the neighbourhood of Chitaldrug and at Kamasamudram, and the village of Gorur. During the course of prospecting, loose crystals of ruby corundum were found in the vicinity of some villages, situated 4½ miles north-east of the Maddur Railway Station, but the trial pits have not revealed the matrix rock of corundum.

8. *Chemical Laboratory.*—With a view to cope with the growing requirements of the department and mining activities, a separate Chemical Laboratory for the department was sanctioned by Government at a cost of Rs. 9,000; and it is being made use of by the mining public.

9. *Departmental Lectures.*—As directed by Government in their Order No. D. 4460-3—Geol. 47-27-4, dated 2nd November 1927, some officers of the department were deputed to give lectures to the Geology students of the Central College. Practical field instruction in Geological Survey methods and in the prospecting for minerals was also imparted to the B.Sc. students.

10. *Inspections.*—(*a*) The Hulikere tunnel works connected with the Irwin Canal project were inspected by the Director and opinion was furnished to the authorities of the Public Works Department in regard to the rocks met with there. The department was also consulted by the Public Works Department, in connection with some other large irrigation works, and the Geological Department also co-operated with the Department of Industries and Commerce in connection with Well-boring Operations.

(*b*) *Mining and Prospecting Blocks.*—Many prospecting and mining blocks in areas other than the Kolar Gold Fields, were inspected by the officers of the department and instructions to remedy the defects noticed were given to licensees and lessees.

11. *Profit-sharing.*—The scheme of profit-sharing by Government in manganese and chrome mining in force for sometime past did not fulfil the anticipations of Government. In view of the speculative nature of mining and of practical difficulties of working the scheme, it was decided to abolish this.

12. *Revision of Mineral License Rules.*—The question of the general revision of the rules for the grant of mineral licenses and leases is under consideration and as a tentative measure the rates of royalty on manganese were revised, with effect from 1st April 1928; and the levy of a uniform rate of ten annas per ton on all grades of ore was ordered.

13. *General.*—Some rock specimens and minerals of the Mysore State were presented to the Indian School of Mines, Dhanbad, and also to the Oosmania Central Technical Institute. Government acknowledge with thanks the presentation made by Mr. C. B. Oakley to the Geological Museum of some valuable and interesting specimens of tin and wolfram ores and concentrates.

14. Government are glad to note that the work of the Department in all its branches was satisfactory during the period under report.

N. RAMA RAO,
Secretary to Government,
Development Departments.